

WHAT IS CLAIMED IS:

1. A hologram screen having a transparent member and a hologram film stuck to the transparent member and producing image by projecting image-forming light from a projector, wherein:

said hologram film is a transmission-type hologram film; and

a reflector for reflecting the image-forming light is arranged on the back surface side of said hologram film.

2. A hologram screen according to claim 1, wherein said hologram film is so arranged as to produce an image on the front surface side of said hologram screen by permitting the image-forming light directly projected from said projector to pass through without causing it to be diffracted, and by diffracting the image-forming light that is reflected by said reflector after having passed through said hologram film.

3. A hologram screen according to claim 1, wherein said reflector is arranged between said hologram film and said transparent member.

4. A hologram screen according to claim 1, wherein said reflector is the one obtained by directly coating said transparent member with a metal or a nonmetal, the one obtained by sticking a metal-coated resin film onto said transparent member, or the one obtained by sticking a metal foil onto said transparent member.

5. A hologram screen according to claim 1, wherein said transparent member is a resin or a glass.

6. A hologram screen according to claim 1, wherein a light-scattering film is disposed on the front surface side of said hologram film to scatter the image-forming light.

7. A hologram screen according to claim 1, wherein said reflector is the one which totally reflects the image-forming light.

8. A hologram screen according to claim 1, wherein

said reflector is the one which permits part of the image-forming light to pass through.

5 9. A hologram screen according to claim 8, wherein said reflector has a light transmission factor of from 20 to 50% or a light reflection factor of from 30 to 60%.

10 10. A hologram screen according to claim 1, wherein said hologram screen has a reflection-preventing film on at least either the front surface side or the back surface side thereof.

11. A hologram screen according to claim 1, wherein a relationship,

$$60^\circ - \tan^{-1} \{L \times \tan 60^\circ / (L + d)\} \leq 0.5^\circ$$

15 is satisfied by a distance L between said hologram screen and the viewer on the side of the front surface thereof, and by a distance d between said hologram film and said reflector.

20 12. A hologram screen according to claim 1, wherein said reflector is detachably attached to said transparent member and to said hologram film.

13. A hologram screen according to claim 1, wherein said reflector is arranged on a portion of said whole hologram film.

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